[2] Amendment to the Claims Objected

The informalities in the claims have been corrected as the following:

- [2.1] "[]" is removed around the number of the claims.
- [2.2] all claims now begin with numerical numbers.
- [2.3] Claim 9 has been changed into one sentence by deleting the period [[.]] immediately after "Preparing a second part with at least a layer of a second organic material containing a second polymerisable group"
- [2.4] a period has been added to the end of Claim 14.

A marked copy for the claims is submitted with this letter.

[3]Amendment to Claims Rejected (under 35 U.S.C 102 (e))

- [3.1] Please cancel Claim 13.
- [3.2] Please amend Claim 9 as the follows:

Please insert ", wherein said bonding of said first part and said second part is achieved by cross-linking between said first polymerisable group and said second polymerisable groups" after "Bonding said first part to said second part under an environment with controlled parameters", so that the definition in cancelled claim 13 can be reflected in the amended claim 9.

- 9. (currently amended) A method to fabricate an organic electronic and opto-electronic device comprising
 - Preparing a first part with at least a layer of a first organic material containing a first polymerisable group
 - Preparing a second part with at least a layer of a second organic material containing a second polymerisable group
 - Bonding said first part to said second part under an environment with controlled parameters, wherein said bonding of said first part and said second part is achieved by cross-linking between said first polymerisable group and said second polymerisable groups.
- [3.3] Please allow Claims 9, 10, 12, 14 of the present application, which are rejected by the examiner under 35 U.S.C 102 (e) as being anticipated by Lupo et al (US Publication No. 203/013220 A1, see examiner's comments) based on the following grounds:

After the above-mentioned amendment to the Claims 9 and 13, method disclosed in Claims 9, 10, 12, 14 of the present invention is not anticipated by Lupo's invention. There are two basic distinctions between the methods of fabricating organic electronic and optoelectronic device as disclosed in claim 9, 10, 12, 14 of the present application and the one disclosed by Lupo et al.

1. Physical Bonding vs. Chemical Bonding

In the bonding method described by Lupo et al, the two substrates are <u>laminated</u> <u>together</u> (Claim1), during which <u>heat and/or pressure</u> is applied for a predetermined time, where the <u>temperature</u> is selected to have <u>a glass transition temperature</u> of at <u>least one of said EL layers in case of polymeric</u> or to have the <u>phase transition</u> <u>temperature for solid to liquid crystalline state</u> or isotropic in case of crystalline EL material. In other words, in Lupo's invention, a phase transition is needed for bonding the two substrates together (basic lamination requirement). Therefore, only **physical** mixing or bonding (lamination) is governing the bonding process at the boundary, which involves melting or nearly melting of at lease one EL layers and physical mixing of the two at the boundary.

On the contrary, in Claim 9 of our invention, we have described a method to bond two separated substrates into an organic electronic and opto-electronic device by <a href="https://example.com/heating.electron/h

(claim 9). This **cross-linking** is **chemical bonds** formed following a chemical

reaction between the two organic materials in the two separate substrates. To form

such cross-linking or chemical bonds, melting of materials is **not** normally required.

Therefore, the present invention discloses a bonding method for forming an organic

electronic and opto-electronic device involving chemical cross-linking and Lupo'

invention discloses a physical bonding, where a cross-linking is never mentioned.

2. More Materials and More Means for Reaction

In Claim 12, we have presented a list of polymerisable materials which is never

mentioned in Lupo's. The polymerisable materials are critic for chemical bonds

formation in our invention. In claim 14, other than heating, two more methods

(electron beam radiation or light lamination) of joining the two parts are presented,

both induces chemical reactions between the two polymerisable materials to form

cross-linking between the two materials, while in Lupo's invention, only heating and

or pressure is used.

In conclusion, the bonding of two separate substrates in our invention is of chemical

nature, while it is of physical nature in Lupo's claims. Please allow Claims 9, 10, 12, 14

of the present application based on the above-presented grounds.

Yours Truly,

Steven Shuyong Xiao

Xingxing Qiu

Chunong Oiu



What is claimed is:

1-8 (Cancelled)

9. [9] (Currently amended) A method to fabricate an organic electronic and optoelectronic device comprising

- Preparing a first part with at least a layer of a first organic material containing
 a first polymerisable group
- Preparing a second part with at least a layer of a second organic material containing a second polymerisable group [[.]]
- Bonding said first part to said second part under an environment with controlled parameters, wherein said bonding of said first part and said second part is achieved by cross-linking between said first polymerisable group and said second polymerisable groups.

<u>10.</u> [10] (Currently amended) A method to fabricate an organic electronic and optoelectronic device as defined in Claim 9 [9], wherein said first polymerisable group is the same as said second polymerisable group.

11. [11] (Currently amended) A method to fabricate an organic electronic and optoelectronic device as defined in Claim 9 [9], wherein said first polymerisable group is different from said second polymerisable group.

12. [12] (Currently amended) A method to fabricate an organic electronic and optoelectronic device as defined in Claim 9 [9], wherein said first polymerisable group and said second polymerisable group are selected from a group of alkyl, acrylate, epoxy, vinyl, vinyl ether, oxethane, acrylnitrile, urethane, amino, hydroxyl, halide, isothiocynate, isocynate, nitrile, or a mixture of at least two of the above.

13. [13] (Cancelled)

14. [14] (Currently amended) A method to fabricate an organic electronic and optoelectronic device as defined in Claim 9 [9], wherein said controlled parameters of said environment include heating, electron beam radiation or light lamination.